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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gregory L. Snitchler et al.      Art Unit : Unknown  
Serial No. : 09/769,705      Examiner : Unknown  
Filed : January 25, 2001  
Title : CABLED CONDUCTORS CONTAINING ANISOTROPIC  
SUPERCONDUCTING COMPOUNDS AND METHOD FOR MAKING THEM

Commissioner for Patents  
Washington, D.C. 20231

**PRELIMINARY AMENDMENT**

Prior to examination, please amend the application as follows:

In the claims:

Please amend claims 8 and 9 as follows:

8. A cabled conductor according to claim 7 wherein each strand has a preselected strand lay pitch and each filament has a preselected filament cross-section and filament twist pitch, and the strand lay pitch, filament cross-section and filament twist pitch being cooperatively selected to provide a filament transposition area permitting crystallographic grain alignment in the grain direction at the filament cross-over points.

9. A cabled conductor according to claim 8 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least ten times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

March 12, 2001  
Date of Deposit

Megan O'Meara  
Signature

Megan O'Meara  
Typed or Printed Name of Person Signing Certificate

Please add new claims 22-35 as follows:

--22. A cabled conductor according to claim 9 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least thirty times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--23. A cabled conductor according to claim 1 wherein each strand has a preselected strand lay pitch and each filament has a preselected filament cross-section and filament twist pitch, and the strand lay pitch, filament cross-section and filament twist pitch being cooperatively selected to provide a filament transposition area permitting the crystallographic grain alignment in the grain direction at the filament cross-over points.--

--24. A cabled conductor according to claim 23 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least ten times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--25. A cabled conductor according to claim 24 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least thirty times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--26. A cabled conductor according to claim 1, wherein each strand has a strand lay pitch and each filament has a filament cross-section and filament twist pitch, and the filament cross-section, filament twist pitch, and strand lay pitch are cooperatively selected so that the filament width in the plane of the widest longitudinal cross-section of the conductor is greater than the filament height of the widest longitudinal cross-section of the conductor.--

--27. A cabled conductor according to claim 2, wherein each strand has a strand lay pitch and each filament has a filament cross-section and filament twist pitch, and the filament cross-section, filament twist pitch, and strand lay pitch are cooperatively selected so that the filament width in the plane of the widest longitudinal cross-section of the conductor is greater than the filament height of the widest longitudinal cross-section of the conductor.--

--28. A cabled conductor according to claim 1, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 3:1.--

--29. A cabled conductor according to claim 2, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 3:1.--

--30. A cabled conductor according to claim 1, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 5:1.--

--31. A cabled conductor according to claim 2, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 5:1.--

--32. A cabled conductor according to claim 1, wherein the cabled conductor has a packing factor of at least about 75 percent.--

--33. A cabled conductor according to claim 1, wherein the cabled conductor has a packing factor of at least about 85 percent.--

--34. A cabled conductor according to claim 2, wherein the cabled conductor has a packing factor of at least about 75 percent.--

--35. A cabled conductor according to claim 2, wherein the cabled conductor has a packing factor of at least about 85 percent.--

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### REMARKS

Applicants have amended claims 8 and 9 and have added new claims 22-35. Support for these amendments can be found in the specification at page 3, lines 13-16; page 5, lines 5-6; page 7, line 33-35; page 9, lines 17- 35; page 12, lines 33-36; page 15, lines 16-20; page 16, lines 25-28; and page 18, lines 1-5. No new matter has been added by the above amendment.

Applicant submits that all of the claims are now in condition for examination, which action is requested. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Filed herewith is a check in payment of the excess claims fees required by the above amendments. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: March 12, 2001

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**"Version with markings to show changes made"**

**In the claims:**

Please amend claims 8 and 9 as follows:

8. (Once Amended) A cabled conductor according to claim 7 wherein each strand has a preselected strand lay pitch and each filament has a preselected filament cross-section and filament twist pitch, and the strand lay pitch, filament cross-section and filament twist pitch being cooperatively selected to provide a filament transposition area [which is always at least ten times the preferred direction area of a typical grain of the desired anisotropic superconducting compound] permitting crystallographic grain alignment in the grain direction at the filament cross-over points.

9. (Once Amended) A cabled conductor according to claim 8 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least [thirty] ten times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.

Please add new claims 22-35 as follows:

--22. A cabled conductor according to claim 9 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least thirty times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--23. A cabled conductor according to claim 1 wherein each strand has a preselected strand lay pitch and each filament has a preselected filament cross-section and filament twist pitch, and the strand lay pitch, filament cross-section and filament twist pitch being cooperatively selected to provide a filament transposition area permitting the crystallographic grain alignment in the grain direction at the filament cross-over points.--

--24. A cabled conductor according to claim 23 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least ten times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--25. A cabled conductor according to claim 24 wherein the strand lay pitch, filament cross-section and filament twist pitch are cooperatively selected to provide a filament transposition area which is always at least thirty times the preferred direction area of a typical grain of the desired anisotropic superconducting compound.--

--26. A cabled conductor according to claim 1, wherein each strand has a strand lay pitch and each filament has a filament cross-section and filament twist pitch, and the filament cross-section, filament twist pitch, and strand lay pitch are cooperatively selected so that the filament width in the plane of the widest longitudinal cross-section of the conductor is greater than the filament height of the widest longitudinal cross-section of the conductor.--

--27. A cabled conductor according to claim 2, wherein each strand has a strand lay pitch and each filament has a filament cross-section and filament twist pitch, and the filament cross-section, filament twist pitch, and strand lay pitch are cooperatively selected so that the filament width in the plane of the widest longitudinal cross-section of the conductor is greater than the filament height of the widest longitudinal cross-section of the conductor.--

--28. A cabled conductor according to claim 1, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 3:1.--

--29. A cabled conductor according to claim 2, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 3:1.--

--30. A cabled conductor according to claim 1, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 5:1.--

--31. A cabled conductor according to claim 2, wherein the cabled conductor has an aspect ratio, width to height of the conductor, greater than or equal to about 5:1.--

--32. A cabled conductor according to claim 1, wherein the cabled conductor has a packing factor of at least about 75 percent.--

--33. A cabled conductor according to claim 1, wherein the cabled conductor has a packing factor of at least about 85 percent.--

--34. A cabled conductor according to claim 2, wherein the cabled conductor has a packing factor of at least about 75 percent.--

--35. A cabled conductor according to claim 2, wherein the cabled conductor has a packing factor of at least about 85 percent.--